

CLAIMS:

1. A fluorescent lamp arrangement comprising:
 - a fluorescent lamp;
 - a source of heat disposed with fluorescent lamp for elevating the temperature of the fluorescent lamp;
 - a sensor for detecting the amount of light generated by the lamp; and
 - a circuit responsive to the sensor which controls the amount of electrical power that is supplied to the fluorescent lamp in accordance with the sensor output and which optimizes the amount to light that is produced by the fluorescent lamp for the amount of electrical power consumed.
2. A fluorescent lamp arrangement as set forth in claim 1, wherein the source of heat comprises thermal insulation disposed with the fluorescent lamp to prevent heat which is generated by the fluorescent lamp from escaping from the fluorescent lamp.
3. A fluorescent lamp arrangement as set forth in claim 2, wherein the thermal insulation comprises a thermal insulating medium disposed about at least the light emitting portion of the fluorescent lamp.
4. A fluorescent lamp arrangement as set forth in claim 2, wherein the thermal insulation comprises an enclosure.
5. A fluorescent lamp arrangement as set forth in claim 4, wherein the enclosure is adapted to be thermally insulative.
6. A fluorescent lamp arrangement as set forth in claim 4, wherein the interior of the enclosure is evacuated.
7. A fluorescent lamp arrangement as set forth in claim 4, wherein the interior of the enclosure is filled with a gas having thermally insulative properties.
8. A fluorescent lamp arrangement as set forth in claim 2, wherein the thermal insulation comprises a glazing of a thermally insulative material on at least the light emitting portions of the fluorescent lamp.
9. A method of increasing fluorescent lamp illumination efficiency comprising:
 - heating the fluorescent lamp;
 - sensing light emitted from the fluorescent lamp and producing a signal indicative of an amount of light emitted thereof; and

controlling the amount of electrical power supplied to the fluorescent lamp in response to the sensed level of illumination to adjust a temperature of the fluorescent lamp temperature toward a value at which the amount of light emitted by the fluorescent lamp is optimized.

10. A method as set forth in claim 9, wherein the heating of the fluorescent lamp comprises preventing heat loss from the fluorescent lamp and using heat which is produced by the lamp to heat itself.

11. A method as set forth in claim 10, wherein the step of preventing loss of heat comprises enclosing the fluorescent lamp in an enclosure which attenuates loss of heat therethrough.

12. A method as set forth in claim 11, wherein the step of preventing heat loss comprises enclosing the fluorescent lamp in an enclosure and evacuating air from a space in the enclosure.

13. A method as set forth in claim 10, wherein the step of preventing heat loss comprises providing the enclosure with a heat reflective layer.

14. A method as set forth in claim 13, wherein the heat reflective layer is made of polycarbonate.

15. A method as set forth in claim 10, wherein the step of preventing heat loss comprises enclosing the fluorescent lamp in an enclosure and filling a space within the enclosure with a medium which exhibits low heat transmission characteristics.